



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,766	06/26/2003	Eran Steinberg	FN102-G	8155
30349	7590	04/13/2007	EXAMINER	
JACKSON & CO., LLP 6114 LA SALLE AVENUE SUITE 507 OAKLAND, CA 94611-2802			SETH, MANAV	
			ART UNIT	PAPER NUMBER
			2624	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	04/13/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/608,766	STEINBERG ET AL.
	Examiner	Art Unit
	Manav Seth	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 June 2003.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-38 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 01/15/04, 01/20/04.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schildkraut et al., U. S. Patent No., 6,252,976.

Regarding claim 1, Schildkraut discloses a method of digital image processing using face detection (col. 1, lines 50-55), comprising: (a) identifying a group of pixels that correspond to a face within a digital image (col. 1, lines 52-53 – step (a); col. 3, lines 50-67 through col. 5, lines 1-45); (b) identifying a second group of pixels that correspond to another feature within the digital image (col. 1, lines 53-54 – step (b); col. 5, lines 46-67 through col. 6, lines 1-50 – red eye pixels group detected); and (c) determining a re-compositioned image including a new group of pixels for at least one of the face and the other feature (col. 1, lines 54-55 – correcting color of red eye pixels; col. 15, lines 62-67).

3. Claims 1-8 and 15-25 are rejected under 35 U.S.C. 102(e) as being anticipated by White et al., U. S. Patent No., 7,035,462.

Regarding claim 1, White discloses a method of digital image processing used for determining a re-compositioned image including a new group of pixels for at least the other feature, where the new group of pixels being the color corrected red-eye pixels (col. 4, lines 35-48; col. 8, lines 10-30). White further discloses “Examples of eye color defect detection algorithms which can be used in accordance with the present invention are disclosed in commonly-assigned U.S. Pat. Nos.... 6,252,976 (Schildkraut et al.), the disclosures of which are herein incorporated by reference” (col. 6, lines 5-15). Since Schildkraut’s disclosure is incorporated by reference in White’s patent, all the subject matter recited in the reference Schildkraut’s is present in the reference White, however, the citations of the subject matter included in Schildkraut reference will made with respect to Schildkraut. Regarding claim 1, Schildkraut discloses a method of digital image processing using face detection (col. 1, lines 50-55), comprising: (a) identifying a group of pixels that correspond to a face within a digital image (col. 1, lines 52-53 – step (a); col. 3, lines 50-67 through col. 5, lines 1-45); (b) identifying a second group of pixels that correspond to another feature within the digital image (col. 1, lines 53-54 – step (b); col. 5, lines 46-67 through col. 6, lines 1-50 – red eye pixels group detected); and (c) determining a re-compositioned image including a new group of pixels for at least one of the face and the other feature (col. 1, lines 54-55 – correcting color of red eye pixels; col. 15, lines 62-67).

Regarding claim 2, White discloses said method is performed within a digital image acquisition device as part of the acquisition process (col. 4, lines 43-48).

Art Unit: 2624

Regarding claims 3-7, these claims recite displaying the recomposed image within said digital image acquisition device and further comprising a user approving the recomposed image prior to capturing/acquiring the image. The subject matter as recited in these claims is very well known since the inception of digital camera. As well known, in every digital camera a preview of the image formed is provided on the LCD screen for the user and it's user's choice to select/approve such an image before capturing or acquiring it on the memory. Similarly, White discloses the same in col. 5, lines 64-68 through col. 6, lines 46-60; col. 13, lines 10-15.

Regarding claim 8, White discloses the other feature comprising an eye, a lip, nose, an ear, hair line, nose bridge, chin, neck, shoulder, or torso, or combinations thereof (col. 4, lines 38-42).

Regarding claim 15-17, White discloses determining values of one or more parameters of the first and second groups of pixels and determining relatively-adjusted values, automatically generating an adjusted image using the relatively-adjusted values of the one or more parameters of the first and second groups of pixels and automatically providing an option to generate an adjusted image using the relatively-adjusted values of the one or more parameters of the first and second group of pixels (Schildkraut - col. 1, lines 50-55; col. 12, lines 1- 67 through col. 15, lines 1-68; White – col. 7, lines 25-44).

Claim 18 has been similarly analyzed and rejected as per claim 1.

Claims 19-25 have been similarly analyzed and rejected as per claims 2-7.

4. Claims 1-3, 5, 7-18 and 26-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Ray et al., U. S. Patent No., 6,940,545.

Regarding claim 1, Ray discloses a method of digital image processing using face detection comprising: (a) identifying a group of pixels that correspond to a face within a digital image (col. 2, lines 1-35; col. 6, lines 35-42 – face detection); (b) identifying a second group of pixels that correspond to another feature within the digital image (col. 9, lines 65-67 through col. 10, lines 1-5 – red eye detected); and (c) determining a re-compositioned image including a new group of pixels for at least one of the face and the other feature (col. 10, lines 6-10 – determining corrected color of red eye pixels; col. 8, lines 4-50; col. 5, lines 20-41).

Regarding claim 2, Ray discloses said method is performed within a digital image acquisition device as part of the acquisition process (col. 2, lines 24-35).

Regarding claims 3, 5 and 7, these claims recite displaying the recomposed image within said digital image acquisition device prior to capturing/acquiring the image. The subject matter as recited in these claims is very well known since the inception of digital camera. As well known, in every digital camera a preview of the image formed is provided on the LCD screen for the user and it's user's choice to select/approve such an image before capturing or acquiring it on the memory. Similarly, Ray discloses the same in col. 5, lines 42-62.

Regarding claim 8, Ray discloses the other feature comprising an eye, a lip, nose, an ear, hair line, nose bridge, chin, neck, shoulder, or torso, or combinations thereof (col. 9, lines 65-67 through col. 10, lines 1-5).

Regarding claim 9, Ray discloses the other feature comprising at least one additional face (col. 2, lines 1-7, lines 24-35 – multiple faces).

Regarding claims 10 and 11, Ray discloses displaying one or more grids on the re-compositioned image to assist a user in evaluating the re-compositioned image and one-or more grid lines are based on composition aesthetics guidelines (col. 8, lines 4 – 20, lines 32-40).

Regarding claim 12, Ray discloses automatically generating the determined recomposed image (col. 7, lines 15-67 through col. 10, lines 1-27 – algorithms for automatically generating re-compositioned image).

Regarding claim 13, Ray discloses automatically providing one or more recomposition options for generating the determined recomposed image (col. 2, lines 48-61; col. 7, lines 15-67 through col. 10, lines 1-27 – algorithms for automatically generating re-compositioned image; col. 8, lines 19-50 – displaying and selection of the options).

Regarding claim 14, Ray discloses displaying a plurality of re-composition options and allowing the user to select an instance of said plurality of options (col. 8, lines 19-50).

Regarding claim 15-17, White discloses determining values of one or more parameters of the first and second groups of pixels and determining relatively-adjusted values, automatically generating an adjusted image using the relatively-adjusted values of the one or more parameters of the first and second groups of pixels and automatically providing an option to generate an adjusted image using the relatively-adjusted values of the one or more parameters of the first and second group of pixels (Ray - col. 9, lines 7-67 through col. 10, lines 1-10 – options for optimal color balance for face regions and then for red eye regions, collecting color data and then weighting the color balance).

Claim 18 has been similarly analyzed and rejected as per claim 1.

Claims 26-27 and 33 have been similarly analyzed and rejected as per claims 8-9.

Claims 28-29 have been similarly analyzed and rejected as per claims 10-11.

Claim 30 have been similarly analyzed and rejected as per claim 12.

Claims 31-32 and 34-35 have been similarly analyzed and rejected as per claims 12, 13 and 14.

Claims 36-38 have been similarly analyzed and rejected as per claims 15-17.

Art Unit: 2624

5. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al., U. S. Patent No., 6,278,491.

Regarding claim 1, Wang discloses a method of digital image processing using face detection (col. 2, lines 22-24), comprising: (a) identifying a group of pixels that correspond to a face within a digital image (col. 4, lines 24-43 and lines 55-62; col. 6, lines 10-15); (b) identifying a second group of pixels that correspond to another feature within the digital image (col. 4, lines 24-43; col. 6, lines 15-28; col. 3, lines 23-38 – red eye pixels group detected); and (c) determining a re-compositioned image including a new group of pixels for at least one of the face and the other feature (col. 7, lines 45-55 – correcting color of red eye pixels; col. 8, lines 3-10).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Schinner et al., U.S. Patent No. 6,900,840, discloses a digital camera and method of using same to view image in live view mode.
- Lin, U.S. Patent No. 6,778,216, discloses a method and apparatus for digital camera real-time image correction in preview mode.
- Gilman et al., U.S. Patent No. 6,760,485, discloses non-linearly modifying a rendered digital image.
- Sugimoto, U.S. Patent No. 6,829,009, discloses electronic camera.

Art Unit: 2624

- Fujimoto et al., U.S. Patent No. 6,035,074, discloses image processing apparatus.
- Luo, U.S. Patent No. 6,134,339, discloses a method and apparatus for determining the position of eyes and for correcting eye-defects in a captured frame.
- Benati et al., U.S. Patent No. 5,432,863, discloses automated detection and correction of eye color defects due to flash illumination.
- Lin, U.S. Publication No. 2003/0151674 A1 discloses a method and system for assessing the photo quality of a captured image in a digital still camera.
- Kubo, U.S. Patent No. 7,057,653, discloses apparatus of image capturing.
- DeLuca, U.S. Patent No. 6,407,777, discloses red-eye filter method and apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

Art Unit: 2624

see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system,
contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BHAVESH M MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Manav Seth
Art Unit 2624
April 10, 2007